

Date: Wednesday, 10/12/2008 2:37:26 PM
 User: Chantal Lavoie

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : 3" OUTER TUBE
Job Number : 43969	
Estimate Number : 10053	
P.O. Number :	Part Number : D26001160
This Issue : 10/12/2008 S.O. No. :	Drawing Number : D2600 REV D1
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SKIDTUBES	Drawing Revision : D1
Previous Run : 34715	Material :
Written By :	Due Date : 08/01/2009 Qty: 83 Um: Each
Checked & Approved By : <u>C20811210</u>	
Comment : Est. D: 02.09.05 Added DSK 066 KJ/RF	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: 7802

- a) Extrude as per Dwg D2600
- b) Material: 6061-T6 (QQ-A-200/8)
- c) Minimum yield tensile strength = 35 ksi
- d) Minimum ultimate tensile strength = 40 ksi
- e) Minimum elongation = 8%
- f) Order at 160" long
- g) Bon L Canada Inc. tool # 897121
- h) To be packed per DSK 066
- i) Pull test to ASTM standard B221 required.
- j) Material certification is required

C208112110

(83)

2.0

D26001160P

Extrusion Round 3" 206



Comment: Qty.: 1.0000 Each(s)/Unit Total: 83.0000 Each(s)
 Extrusion Round 3" 206

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

- Receive & Inspect For Transit Damage
- Ensure material certification is attached

P 9/11/13 (89)

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

- Inspect dimension per Dwg D2600
- Check Pull test per Dwg D2600 for compliance page attached
- Check hardness with Webster tester

S 09/01/14 (counter) (89)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 10/12/2008 2:37:26 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 3" OUTER TUBE

Job Number: 43969

Part Number: D26001160

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

HALL 003 → 68

skid tube cell

rack # L6005 - 21 PCS MF 09-01-16

6.0

QC21

FINAL INSPECTION/W/O RELEASE



09/01/19 JF

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-01-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2600	REV. 0 SHEET 1 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1
A	97.01.21	NEW ISSUE	
B	97.09.09	CHANGE MATERIAL SPEC.	
C	98.04.16	ADD D2600-3, UPDATE D2600-1 WIDTH, ADD DIE NO.	
D	98.08.20	INCREASE MIN. UTS TO 40 KSI	
DI	01-04-17	ADD PART NUMBERS + DIE NUMBERS <i>FGP</i>	

RELEASED
98.08.25 DS

GENERAL NOTES

1. MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 40 ksi
MINIMUM ELONGATION = 8 %

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED
TO ASTM STANDARD B221 BY AN APPROVED TESTING
FACILITY TO ENSURE THAT THE BATCH MEETS THE
ABOVE MINIMUM MECHANICAL PROPERTIES.

2. BREAK ALL SHARP CORNERS 0.010 MAX.
3. NO TOOLING MARKS.
4. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
5. ALL DIMENSIONS ARE IN INCHES.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 43969

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

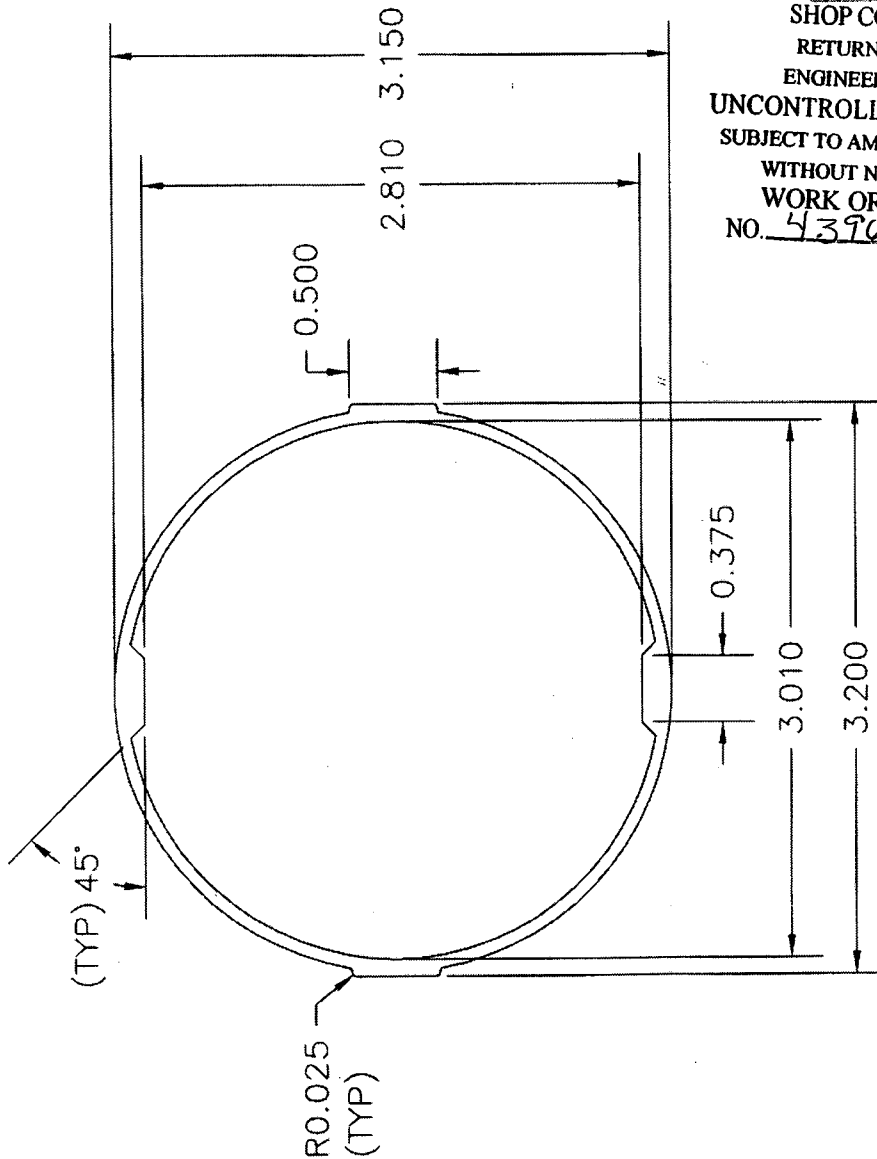
NOTE: Date & initial all entries



DESIGN <i>DB</i>	DRAWN BY <i>DB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>KE</i>	DRAWING NO. D2600	REV. D SHEET 2 OF 5
DATE 98.08.20		TITLE EXTRUSION	SCALE 1:1

RELEASED
98.8.25 DS

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WORK ORDER
NO. 43969



D2600-1

MANUFACTURED WITH CARADON INDALOX DIE # MH-18870
OR BON L DIE # 897121 (PREFERRED CHOICE)
PART NUMBER IS D2600-1-XX WHERE XX IS CUT LENGTH IN INCHES (EG. D2600-1-160 V. 160" LONG)

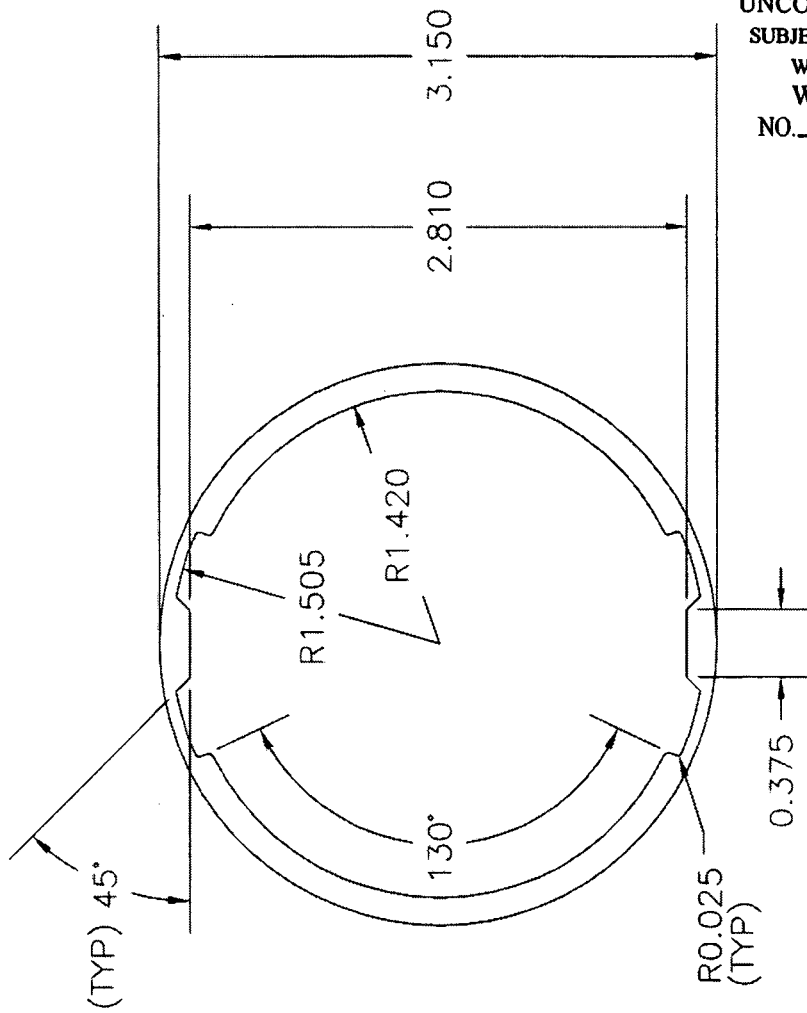




DESIGN <i>DA</i>	DRAWN BY <i>DA</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>SA</i>	DRAWING NO. D2600	REV. D SHEET 3 OF 5
DATE 98.08.20	TITLE EXTRUSION		SCALE 1:1

RELEASED
SHORT COPY DS

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 43969



D2600-3

MANUFACTURED WITH CARADON INDALEX DIE # MH-18859
OR BON L DIE # 897122 (PREFERRED CHOICE)

PART NUMBER IS D2600-3-XXX WHERE XXX IS CUT LENGTH IN INCHES (E.G. D2600-3-120 IS 120" LONG)





ACCT# 00046024

INVOICING COMPANY AND LOCATION
SIGNATURE ALUMINUM CANADA
500 EDWARD AVENUE
RICHMOND HIL ON L4C 4Y9

SHIPPING MANIFEST

MANIFEST DATE
01-12-09
MANIFEST NUMBER
653081
SALES ORDER NUMBER
41303

REFER TO
THESE NUMBERS ON
ALL CORRESPONDENCECREDIT REP
HAMBROOK, PAU
905-508-3250

SALES REP

TERMS / FREIGHT O / P	LOCATION RIH	TRAILER NUMBER 57375	SALESMAN 59358	FIELD SALES REP Kutter A 450-435-6551	CUST SERVICE REP Burton D 905-427-2227	BILL OF LADING NUMBER 08387470
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SHIP TO DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY ON K6A 1K7 CN PHONE 613-632-5200	SOLD TO / PURCHASER DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY ON K6A 1K7 CN PHONE 613-632-5200
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CUSTOMER ID 46024	ORDER DATE 12/11/08	CUSTOMER PO NUMBER 7802	JOB
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ITEM NO.	ORIGINAL ORDER QUANTITY	UNIT	PREVIOUS SHIPPED QUANTITY	MFG. PART NUMBER	ALLOY & TEMPER	FINISH DESCRIPTION	THIS SHIPMENT			UNIT	QUANTITY DUE
				CUSTOMER PART NUMBER	LENGTH CUTTING TOLERANCE	FABRICATION DESCRIPTION SHIPPING TOLERANCE	NBR OF PKGS	GROSS POUNDS	NET QUANTITY		
02	83	KG	0	DAA-897121-1	6061 /T6	MILL	2	579	559	KG	0
		M	0	D2600-1-160	160"	CERTIFICATE OF COMP			361.70	M	0
		PC	0		+5/16 "	(+015-015,0095-0070)			89	PC	0
				LOT/TKT DETAIL:		41303020 / 202919	1	139	129		21 PC
						41303021 / 203000	1	440	430		68 PC
TOTALS							2	579	559	KG	
									361.70	M	
									89	PC	

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.

No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

PAGE 1

CERTIFICATE OF COMPLIANCE

SIGNATURE ALUMINUM CANADA

500 EDWARD AVENUE
RICHMOND HILL, ON L4C 4Y9

Cert Date	Cert No	Sales Order	Page
01/12/09	185955	41303	1
Cust PO	B/L No	Lot	Date
7802	08387470	41303020	1/12/09

Sold To	Ship To
46024	46024
DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Cust Part
2.000	DAA-897121-1	160" Mill 6061 T6	D2600-1-160

Gross Weight	139 KGS
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Net Qty	129 KG	21 PC	85 M	1 PKG
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Specification	Die Desc
AMS-QQ-A-200/8 & ASTM B221-08	

Mechanical Tests:

Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/ Drift HREW
1	286.9 / 41.6	254.5 / 36.9	11.8	.0	91

Chemical Limits:

	SI	FE	CU	MN	MG	CR	ZN	TI	OTHER
MIN:	.40	.00	.15	.00	.80	.04	.00	.00	EA: .05
MAX:	.80	.70	.40	.15	1.20	.35	.25	.15	TOT: .15

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgment form. No other warranties are applicable.

D. VanBakel, QA Manager Signature Aluminum Canada Inc

S
09/06/14

CERTIFICATE OF COMPLIANCE

SIGNATURE ALUMINUM CANADA

500 EDWARD AVENUE
RICHMOND HILL, ON L4C 4Y9

Cert Date	Cert No	Sales Order	Page
01/12/09	185956	41303	1
Cust PO	B/I No	Lot	Date
7802	08387470	41303021	1/12/09

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Cust Part
2.000	DAA-897121-1	160" Mill 6061 T6	D2600-1-160
Gross Weight	440 KGS		
Net Qty	430 KG	68 PC	276 M 1 PKG
Specification	Die Desc		
AMS-QQ-A-200/8 & ASTM B221-08			

Mechanical Tests:

Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/Drift HREW
1	286.9 / 41.6	254.5 / 36.9	11.8	.0	91

Chemical Limits:

	SI	FE	CU	MN	MG	CR	ZN	TI	OTHER
MIN:	.40	.00	.15	.00	.80	.04	.00	.00	EA: .05
MAX:	.80	.70	.40	.15	1.20	.35	.25	.15	TOT: .15

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgment form. No other warranties are applicable.

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